

#### ABSTRACT

There is disclosed a process for producing alkenyl aromatic foams utilizing a combination of atmospheric and organic gases as blowing agent, preferably using greater than 30% by weight of atmospheric gas, and preferably also using a predetermined amount of a masterbatch mix comprising a styrenic polymer, a rubbery block copolymer, and a solid blowing agent. Also disclosed are alkenyl aromatic foams produced by the process which exhibit increased densities, increased thermoforming capabilities, increased post-expansion properties, and increased retainment of the atmospheric and organic gases.